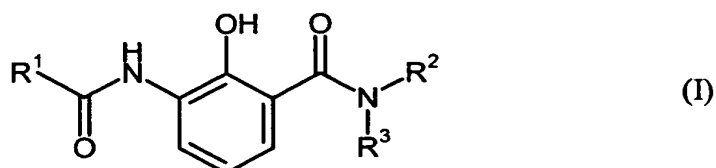


Patent Claims

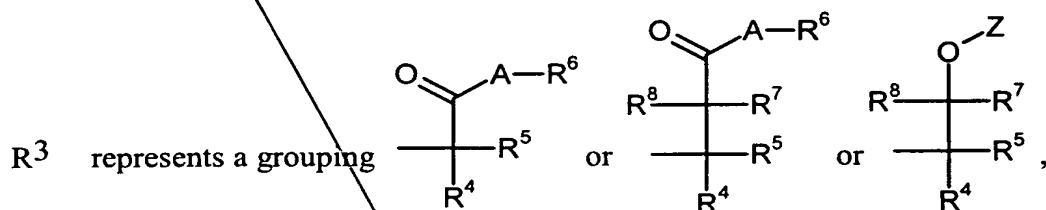
1. Use of compounds of the formula (I),



in which

$\text{R}^1$  represents hydrogen or alkyl,

$\text{R}^2$  represents hydrogen or alkyl, or



in which

A represents oxygen, sulphur or  $\text{---}(\text{N}-\text{R}^9)\text{---}$  in which

$\text{R}^9$  represents hydrogen or alkyl or together with  $\text{R}^6$  and the nitrogen atom to which they are attached forms an optionally substituted heterocyclic ring,

$\text{R}^4$  represents hydrogen, optionally substituted alkyl or optionally substituted aryl or

$\text{R}^2$  and  $\text{R}^4$  together with the atoms to which they are attached form a heterocyclic ring,

$R^5$  represents hydrogen or alkyl or

~~R<sup>4</sup> and R<sup>5</sup> together with the carbon atom to which they are attached form a carbocyclic ring,~~

**R<sup>6</sup>** represents hydrogen or in each case optionally substituted alkyl, cycloalkyl, aryl or heterocyclyl,

$R^7$  represents hydrogen or alkyl,

$R^8$  represents hydrogen or alkyl and

**Z** represents hydrogen or in each case optionally substituted alkyl, alkylcarbonyl, cycloalkyl, cycloalkylcarbonyl, aryl, arylcarbonyl, heterocyclyl or heterocyclylcarbonyl,

for controlling organisms causing damage to plants and industrial materials.

20     2.     Use of compounds of the formula (I) according to Claim 1, characterized in that

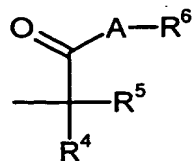
**R<sup>1</sup>** represents hydrogen or methyl,

25       $R^2$  represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl and

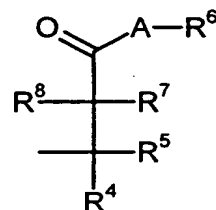
[illegible]

*contd.*  
*a<sup>1</sup>*

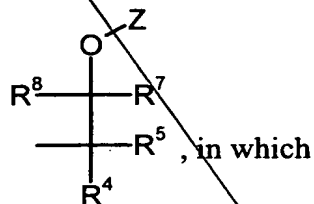
$R^3$  represents a grouping



or



or



A represents oxygen, sulphur or  $\text{---}(\text{N} \text{---} \text{R}^9) \text{---}$  in which

$R^9$  represents hydrogen or alkyl having 1 to 4 carbon atoms or together with  $R^6$  and the nitrogen atom to which they are attached forms an optionally  $\text{C}_1\text{--C}_4$ -alkyl-substituted heterocyclic ring having 3 to 7 ring members,

$R^4$  represents hydrogen or alkyl which is optionally substituted by alkoxy, alkylthio, alkoxycarbonyl or alkylcarbonyloxy having in each case 1 to 6 carbon atoms in the alkyl moiety or by arylcarbonyloxy which is optionally substituted in the aryl moiety by hydroxyl, formyloxy, or represents aryl, heterocyclyl, arylalkyl or heterocyclylalkyl having in each case 1 to 6 carbon atoms in the alkyl moiety and being in each case optionally substituted in the aryl moiety or heterocyclyl moiety, or

$R^2$  and  $R^4$  together with the atoms to which they are attached form a heterocyclic ring having 3 to 6 ring members,

$R^5$  represents hydrogen or  $\text{C}_1\text{--C}_4$ -alkyl or

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contd.  
a<sup>1</sup>

R<sup>4</sup> and R<sup>5</sup> together with the carbon atom to which they are attached form a carbocyclic ring having 3 to 6 ring members,

R<sup>6</sup> represents hydrogen or C<sub>1</sub>-C<sub>12</sub>-alkyl, optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>7</sub>-cycloalkyl, or represents aryl, arylalkyl having 1 to 6 carbon atoms in the alkyl moiety, heterocyclyl or heterocyclalkyl having 1 to 6 carbon atoms in the alkyl moiety, each of which is optionally substituted in the aryl or heterocyclyl moiety,

R<sup>7</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,

R<sup>8</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl and

Z represents hydrogen or C<sub>1</sub>-C<sub>12</sub>-alkyl or alkylcarbonyl, optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>7</sub>-cycloalkyl or cycloalkylcarbonyl, represents aryl, arylcarbonyl, arylalkyl, arylalkylcarbonyl having 1 to 6 carbon atoms in the alkyl moiety, heterocyclyl, heterocyclalkylcarbonyl, heterocyclalkyl or heterocyclalkylcarbonyl having 1 to 6 carbon atoms in the alkyl moiety, each of which is optionally substituted in the aryl or heterocyclyl moiety,

for controlling organisms causing damage to plants and industrial materials.

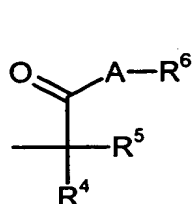
3. Use of compounds of the formula (I) according to Claim 1, characterized in that

R<sup>1</sup> represents hydrogen or methyl,

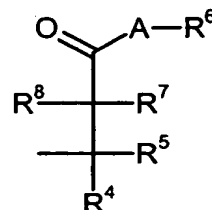
contd.  
a<sup>1</sup>

R<sup>2</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl and

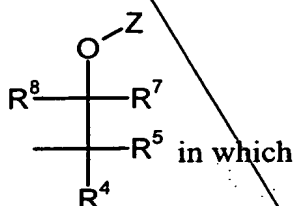
R<sup>3</sup> represents a grouping



or



or



in which

A represents oxygen, sulphur or  $-(\text{N}-\text{R}^9)-$  in which

R<sup>9</sup> represents hydrogen or methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl or together with R<sup>6</sup> and the nitrogen atom to which they are attached represents optionally methyl- or ethyl-substituted pyrrolidinyl, morpholinyl, piperidinyl, piperazinyl or hexahydroazepinyl,

R<sup>4</sup> represents hydrogen or represents methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, optionally substituted by hydroxyl, formyloxy, phenylcarbonyloxy which is optionally substituted in the phenyl moiety, methoxy, ethoxy, methylthio, ethylthio, methoxycarbonyl, ethoxycarbonyl, methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, pentylcarbonyloxy or hexylcarbonyloxy, or represents phenyl, benzyl, 1-phenethyl, 2-phenethyl or indolylmethyl, each of which is optionally substituted in the phenyl moiety or heterocyclyl moiety, or

contd.  
a<sup>1</sup>

5

R<sup>2</sup> and R<sup>4</sup> together with the atoms to which they are attached represent a pyrrolidine or piperidine ring,

R<sup>5</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl or

10

R<sup>4</sup> and R<sup>5</sup> together with the carbon atom to which they are attached represent a cyclopropane ring, cyclopentane or cyclohexane ring,

15

R<sup>6</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, pentyl, hexyl, heptyl, octyl, optionally methyl-, ethyl-, n- or i-propyl-, n-, i-, s- or t-butyl-substituted cyclopentyl or cyclohexyl, or represents phenyl, benzyl 1-phenethyl, 2-phenethyl, phenylpropyl, phenylbutyl, phenylpentyl or phenylhexyl, pyrrolidinyl, morpholinyl, pyrrolidinylbutyl or morpholinylbutyl, each of which is optionally substituted in the phenyl or heterocyclyl moiety, or represents pyrrolidonyl-substituted methyl, ethyl or propyl,

20

R<sup>7</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl,

25

R<sup>8</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl and

30

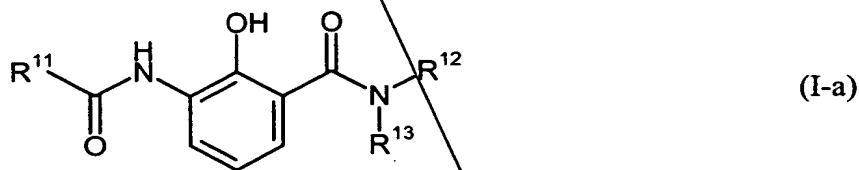
Z represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, pentyl, hexyl, heptyl, octyl, methylcarbonyl, ethylcarbonyl, n- or i-propylcarbonyl, n-, i-, s- or t-butylcarbonyl, pentylcarbonyl, hexylcarbonyl, heptylcarbonyl, octylcarbonyl, optionally methyl-, ethyl-, n- or i-propyl-, n-, i-, s- or t-butyl-substituted cyclopentyl, cyclohexyl, cyclopentylcarbonyl or cyclohexylcarbonyl, represents

contd.  
a<sup>1</sup>

phenyl, benzyl, 1-phenethyl, 2-phenethyl, phenylpropyl, phenylbutyl, phenylpentyl or phenylhexyl, pyrrolidinyl, morpholinyl, pyrrolidinylbutyl, morpholinylbutyl, phenylcarbonyl, benzylcarbonyl, 1-phenethylcarbonyl, 2-phenethylcarbonyl, phenylcarbonyl-propylcarbonyl, phenylcarbonylbutylcarbonyl, phenylcarbonyl-pentylcarbonyl or phenylcarbonylhexylcarbonyl, pyrrolidinylcarbonyl, morpholinylcarbonyl, pyrrolidinylcarbonylbutylcarbonyl or morpholinylcarbonylbutylcarbonyl, each of which is optionally substituted in the phenyl or heterocyclyl moiety,

for controlling organisms causing damage to plants and industrial materials.

4. Compounds of the formula (I-a),

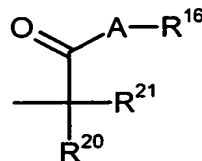


in which

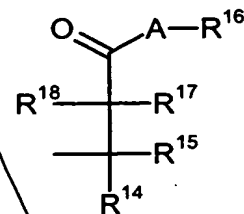
R<sup>11</sup> represents hydrogen or alkyl,

R<sup>12</sup> represents hydrogen or alkyl, or

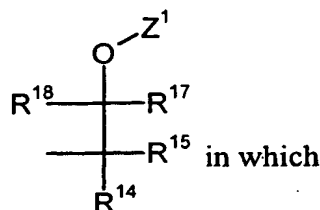
R<sup>13</sup> represents a grouping



or



or



**R<sup>19</sup>** represents hydrogen or alkyl or together with R<sup>16</sup> and the nitrogen atom to which they are attached forms an optionally substituted heterocyclic ring,

R<sup>12</sup> and R<sup>14</sup> together with the atoms to which they are attached form a heterocyclic ring,

~~R<sup>14</sup> and R<sup>15</sup> together with the carbon atom to which they are attached form a carbocyclic ring,~~

R<sup>17</sup> represents hydrogen or alkyl and

**Z<sup>1</sup>** represents hydrogen or in each case optionally substituted alkyl, alkylcarbonyl, cycloalkyl, cycloalkylcarbonyl, aryl, arylcarbonyl, heterocyclyl or heterocyclylcarbonyl,

~~R<sup>20</sup> represents hydrogen, optionally substituted alkyl or optionally substituted aryl or hetaryl or~~



contd.  
a<sup>1</sup>

R<sup>12</sup> and R<sup>20</sup> together with the atoms to which they are attached form a heterocyclic ring,

5

R<sup>21</sup> represents hydrogen or alkyl or

R<sup>20</sup> and R<sup>21</sup> together with the carbon atom to which they are attached form a carbocyclic ring.

10

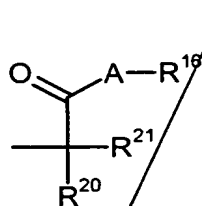
5. Compounds of the formula (I-a), according to Claim 4, characterized in that

R<sup>11</sup> represents hydrogen or methyl,

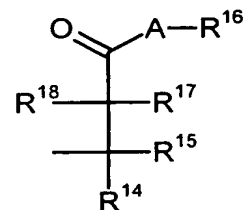
R<sup>12</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl and

15

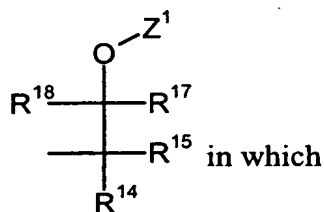
R<sup>13</sup> represents a grouping



or



or



in which

A represents oxygen, sulphur or -(N-R<sup>19</sup>)- in which

20

R<sup>19</sup> represents hydrogen or alkyl having 1 to 4 carbon atoms or together with R<sup>16</sup> and the nitrogen atom to which they are attached forms an optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted heterocyclic ring having from 3 to 7 ring members,

contd.  
a<sup>1</sup>

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R<sup>14</sup> represents hydrogen or alkyl which is optionally substituted by alkoxy, alkylthio, alkoxycarbonyl or alkylcarbonyloxy having in each case 1 to 6 carbon atoms in the alkyl moiety or by arylcarbonyloxy which is optionally substituted in the aryl moiety by hydroxyl, formyloxy, or represents aryl, heterocyclyl, arylalkyl or heterocyclylalkyl having in each case 1 to 6 carbon atoms in the alkyl moiety and being in each case optionally substituted in the aryl moiety or heterocyclyl moiety, or

10

R<sup>12</sup> and R<sup>14</sup> together with the atoms to which they are attached form a heterocyclic ring having 3 to 6 ring members,

15

R<sup>15</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl or

20

R<sup>14</sup> and R<sup>15</sup> together with the carbon atom to which they are attached form a carbocyclic ring having 3 to 6 ring members,

25

R<sup>16</sup> represents hydrogen or C<sub>1</sub>-C<sub>12</sub>-alkyl, optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>7</sub>-cycloalkyl, represents aryl, arylalkyl having 1 to 6 carbon atoms in the alkyl moiety, heterocyclyl, heterocyclylalkyl having 1 to 6 carbon atoms in the alkyl moiety, each of which is optionally substituted in the aryl or heterocyclyl moiety, or represents pyrrolidonyl-substituted C<sub>1</sub>-C<sub>4</sub>-alkyl,

30

R<sup>17</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl and

R<sup>18</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl,

contd.  
a<sup>1</sup>

5

Z<sup>1</sup> represents hydrogen or C<sub>1</sub>-C<sub>12</sub>-alkyl or alkylcarbonyl, optionally C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>3</sub>-C<sub>7</sub>-cycloalkyl or cycloalkylcarbonyl, represents aryl, arylcarbonyl, arylalkyl, arylalkylcarbonyl having 1 to 6 carbon atoms in the alkyl moiety, heterocyclyl, heterocyclylcarbonyl, heterocyclylalkyl or heterocyclylalkylcarbonyl having 1 to 6 carbon atoms in the alkyl moiety, each of which is optionally substituted in the aryl or heterocyclyl moiety,

10

R<sup>20</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl which is optionally substituted by formyloxy, by arylcarbonyloxy which is optionally substituted in the aryl moiety or by alkoxy, alkylthio, alkoxycarbonyl or alkylcarbonyloxy having in each case 1 to 6 carbon atoms in the alkyl moiety or represents aryl, heterocyclyl, arylalkyl having 2 to 6 carbon atoms in the alkyl moiety or heterocyclylalkyl having 1 to 6 carbon atoms in the alkyl moiety, each of which is optionally substituted in the aryl moiety or heterocyclyl moiety, or represents substituted benzyl, or

15

20

R<sup>12</sup> and R<sup>20</sup> together with the atoms to which they are attached form a heterocyclic ring having 3 to 6 ring members,

25

R<sup>21</sup> represents hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl or

R<sup>20</sup> and R<sup>21</sup> together with the carbon atom to which they are attached form a carbocyclic ring having 3 to 6 ring members.

30

6. Compounds of the formula (I-a) according to Claim 4, characterized in that

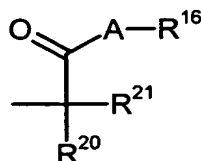
R<sup>11</sup> represents hydrogen or methyl,

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a<sup>1</sup>

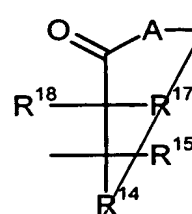
R<sup>12</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl and

5

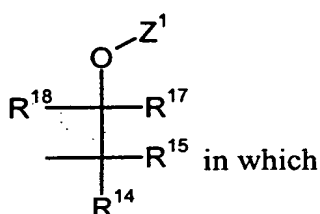
R<sup>13</sup> represents a grouping



or



or



in which

A represents oxygen, sulphur or  $-(N-R^{19})-$  in which

10

R<sup>19</sup> represents hydrogen or methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl or together with R<sup>16</sup> and the nitrogen atom to which they are attached represents optionally methyl- or ethyl-substituted pyrrolidinyl, morpholinyl, piperidinyl, piperazinyl or hexahydroazepinyl,

15

R<sup>14</sup> represents hydrogen or represents methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, optionally substituted by hydroxyl, formyloxy, phenylcarbonyloxy which is optionally substituted in the phenyl moiety, methoxy, ethoxy, methylthio, ethylthio, methoxycarbonyl, ethoxycarbonyl, methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, pentylcarbonyloxy or hexylcarbonyloxy, or represents phenyl, benzyl, 1-phenethyl, 2-phenethyl or indolylmethyl, each of which is optionally substituted in the phenyl moiety or heterocyclyl moiety, or

25

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contd.  
a<sup>1</sup>

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R<sup>12</sup> and R<sup>14</sup> together with the atoms to which they are attached represent a pyrrolidine or piperidine ring,

R<sup>15</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl or

10

R<sup>14</sup> and R<sup>15</sup> together with the carbon atom to which they are attached represents a cyclopropane ring, cyclopentane or cyclohexane ring,

15

R<sup>16</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, pentyl, hexyl, heptyl, octyl, optionally methyl-, ethyl-, n- or i-propyl-, n-, i-, s- or t-butyl-substituted cyclopentyl or cyclohexyl, or represents phenyl, benzyl, 1-phenethyl, 2-phenethyl, phenylpropyl, phenylbutyl, phenylpentyl or phenylhexyl, pyrrolidinyl, morpholinyl, pyrrolidinylbutyl or morpholinylbutyl, each of which is optionally substituted in the phenyl or heterocyclyl moiety, or represents pyrrolidonyl-substituted methyl, ethyl or propyl,

20

R<sup>17</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl and

25

R<sup>18</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl,

30

Z<sup>1</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, pentyl, hexyl, heptyl, octyl, methylcarbonyl, ethylcarbonyl, n- or i-propylcarbonyl, n-, i-, s- or t-butylcarbonyl, pentylcarbonyl, hexylcarbonyl, heptylcarbonyl, octylcarbonyl, optionally methyl-, ethyl-, n- or i-propyl-, n-, i-, s- or t-butyl-substituted cyclopentyl, cyclohexyl,

cyclopentylcarbonyl or cyclohexylcarbonyl, represents phenyl, benzyl, 1-phenethyl, 2-phenethyl, phenylpropyl, phenylbutyl, phenylpentyl or phenylhexyl, pyrrolidinyl, morpholinyl, pyrrolidinylbutyl, morpholinylbutyl, phenylcarbonyl, benzylcarbonyl, 1-phenethylcarbonyl, 2-phenethylcarbonyl, phenylcarbonylpropylcarbonyl, phenylcarbonylbutylcarbonyl, phenylcarbonylpentylcarbonyl or phenylcarbonylhexylcarbonyl, pyrrolidinylcarbonyl, morpholinylcarbonyl, pyrrolidinylcarbonylbutylcarbonyl or morpholinylcarbonylbutylcarbonyl, each of which is optionally substituted in the phenyl or heterocyclyl moiety,

10

R<sup>20</sup> represents hydrogen or represents methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, optionally substituted by formyloxy, by phenylcarbonyloxy which is optionally substituted in the phenyl moiety, by methoxy, ethoxy, methylthio, ethylthio, methoxycarbonyl, ethoxycarbonyl, methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, pentylcarbonyloxy or hexylcarbonyloxy, or represents phenyl, 1-phenethyl, 2-phenethyl or indolylmethyl, each of which is optionally substituted in the phenyl moiety or heterocyclyl moiety, or represents substituted benzyl, or

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R<sup>12</sup> and R<sup>20</sup> together with the atoms to which they are attached represent a pyrrolidine or piperidine ring,

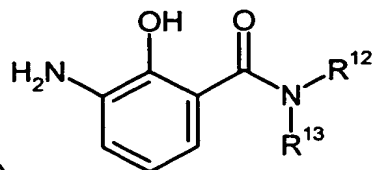
R<sup>21</sup> represents hydrogen, methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl or

30

~~R<sup>20</sup> and R<sup>21</sup> together with the carbon atoms to which they are attached represent a cyclopropane ring, cyclopentane or cyclohexane ring.~~

**Figure 6.** The effect of the initial concentration of the monomer ( $C_0$ ) on the polymerization rate at different temperatures. The reaction conditions were as follows:  $[AIBN] = 0.008 \text{ mol/L}$ ,  $[KBrO_3] = 0.008 \text{ mol/L}$ ,  $[H_2SO_4] = 0.008 \text{ mol/L}$ ,  $[NaNO_2] = 0.008 \text{ mol/L}$ ,  $[K_2S_2O_8] = 0.008 \text{ mol/L}$ ,  $[K_2Cr_2O_7] = 0.008 \text{ mol/L}$ ,  $[K_2CO_3] = 0.008 \text{ mol/L}$ ,  $[K_2C_2O_4] = 0.008 \text{ mol/L}$ ,  $[K_2C_2O_6] = 0.008 \text{ mol/L}$ ,  $[K_2C_2O_8] = 0.008 \text{ mol/L}$ .

Compounds of the formula (II-a),

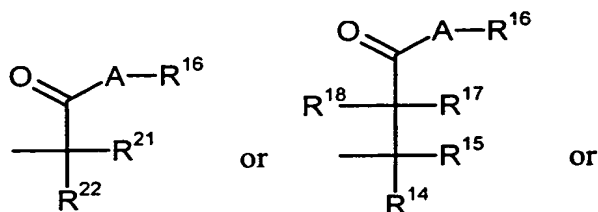


(II-a)

in which

R<sup>12</sup> is as defined above and

R<sup>13</sup> represents a grouping



A, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, Z<sup>1</sup> and R<sup>21</sup> are each as defined above,

R<sup>22</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl which is substituted by formyloxy, by arylcarbonyloxy which is optionally substituted in the aryl moiety or by alkoxy, alkylthio, alkoxy carbonyl or alkylcarbonyloxy having in each case 1 to 6 carbon atoms in the alkyl moiety, or represents unsubstituted C<sub>2</sub>-C<sub>4</sub>-alkyl, represents aryl, heterocyclyl, arylalkyl having 2 to 6 carbon atoms in the alkyl moiety or heterocyclylalkyl having 1 to 6 carbon atoms in the alkyl moiety, each of which is optionally

contd.  
a1

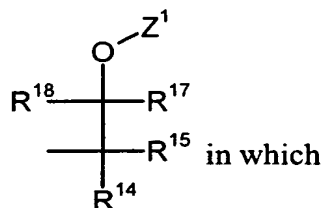
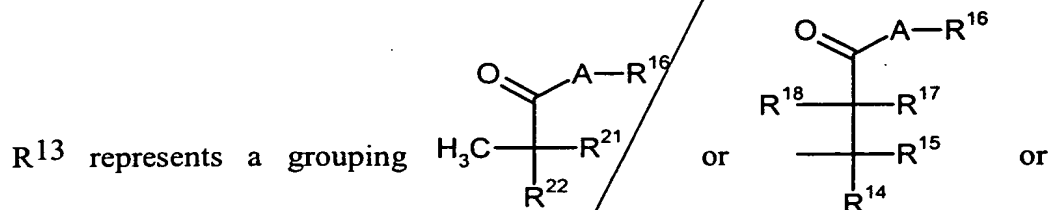
substituted in the aryl moiety or heterocyclyl moiety, or represents substituted benzyl, or

R<sup>22</sup> and R<sup>12</sup> together with the atoms to which they are attached form a heterocyclic ring,

R<sup>22</sup> and R<sup>21</sup> together with the carbon atom to which they are attached form a carbocyclic ring.

10 8. Compounds of the formula (II-a) according to Claim 7, characterized in that

R<sup>12</sup> is as defined above and



A, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup>, R<sup>18</sup>, Z<sup>1</sup> and R<sup>21</sup> are each as defined above,

R<sup>22</sup> represents C<sub>1</sub>-C<sub>4</sub>-alkyl which is substituted by formyloxy, by arylcarbonyloxy which is optionally substituted in the aryl moiety or by alkoxy, alkylthio, alkoxycarbonyl or alkylcarbonyloxy having in each case 1 to 6 carbon atoms in the alkyl moiety, or represents unsubstituted C<sub>2</sub>-C<sub>4</sub>-alkyl, represents aryl, heterocyclyl, arylalkyl having 2 to 6 carbon atoms in the alkyl moiety or heterocyclylalkyl having 1 to



6 carbon atoms in the alkyl moiety, each of which is optionally substituted in the aryl moiety or heterocyclyl moiety, or represents substituted benzyl, or

5  $R^{22}$  and  $R^{12}$  together with the atoms to which they are attached represent a pyrrolidine or piperidine ring or

$R^{22}$  and  $R^{21}$  together with the carbon atom to which they are attached represent a cyclopentane or cyclohexane ring.

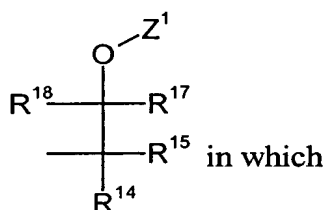
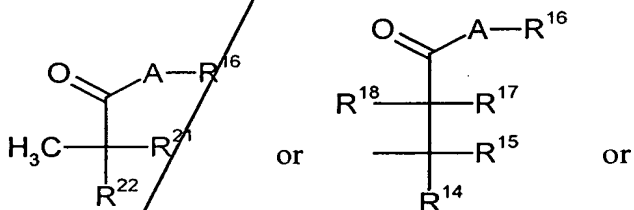
10

9. Compounds of the formula (II-a) according to Claim 7, characterized in that

$R^{12}$  is as defined above and

15

$R^{13}$  represents a grouping



$A, R^{14}, R^{15}, R^{16}, R^{17}, R^{18}, Z^1$  and  $R^{21}$  are each as defined above,

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$R^{22}$  represents methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, each of which is substituted by formyloxy, by phenylcarbonyloxy which is optionally substituted in the phenyl moiety, by methoxy, ethoxy, methylthio, ethylthio, methoxycarbonyl, ethoxycarbonyl, methylcarbonyloxy, ethylcarbonyloxy, propylcarbonyloxy, pentylcarbonyloxy or hexylcarbonyloxy, or

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contd.  
a<sup>1</sup>

represents unsubstituted ethyl, n- or i-propyl, n-, i-, s- or t-butyl, represents phenyl, 1-phenethyl, 2-phenethyl or indolylmethyl, each of which is optionally substituted in the phenyl moiety or heterocyclyl moiety, or represents substituted benzyl, or

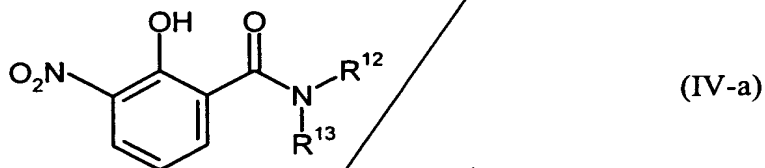
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R<sup>22</sup> and R<sup>12</sup> together with the atoms to which they are attached represent a pyrrolidine or piperidine ring or

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R<sup>22</sup> and R<sup>21</sup> together with the carbon atom to which they are attached represent a cyclopentane or cyclohexane ring.

10. Compounds of the formula (IVa),



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in which

R<sup>12</sup> and R<sup>13</sup> are each as defined in Claim 4.

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11. Compositions, comprising extenders and/or carriers and, if appropriate, surfactants, characterized in that they comprise at least one compound as defined in Claims 4 to 6.

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12. Method for controlling pests, characterized in that compounds as defined in Claims 4 to 6 or compositions as defined in Claim 11 are allowed to act on pests and/or their habitat.

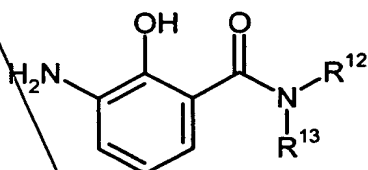
~~13. Use of compounds as defined in Claims 4 to 6 or of compositions as defined in Claim 11 for controlling pests.~~

Amen.  
A<sup>2</sup>

14. Process for preparing pesticides, characterized in that compounds as defined in Claims 4 to 6 are mixed with extenders and/or surfactants.

15. Process for preparing compounds of the formula (I-a) as defined in Claim 4, characterized in that

a) aminosalicylamides of the general formula (II),

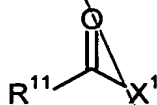


(II)

in which

R<sup>12</sup> and R<sup>13</sup> are each as defined above,

are reacted with an acylating agent of the general formula (III),



(III)

in which

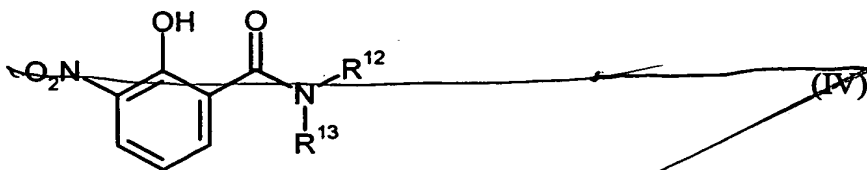
R<sup>11</sup> is as defined above and

X<sup>1</sup> represents halogen, hydroxyl, alkoxy or alkylcarbonyloxy,

if appropriate in the presence of a diluent, if appropriate in the presence of an acid acceptor, and if appropriate in the presence of another reaction auxiliary, or that

b) nitrosalicylamides of the general formula (IV)

contd.  
a<sup>2</sup>



$R^{12}$  and  $R^{13}$  are each as defined above

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are reacted with formic acid, if appropriate in the presence of a catalyst and if appropriate in the presence of a further reaction auxiliary.

[illegible]